JavaScript:

Netscape's answer to Sun's wunderkind, a.k.a. Java.

It isn't as difficult as it may first appear to be.

A little history, or Java and JavaScript: Alike in name only...

One of the most important things to note, is that JavaScript is not Java. Netscape introduced JavaScript to improve a web page's ability to interact with the user, that is to say, they had not yet implemented support for Java and needed something to fill the gap until they could.

There is another version of the story which says that Netscape wanted to update their "LiveScript" language into something which could be used in any browser. This project was once known as "Mocha". Java, Mocha, what's next, an OS named after Juan Valdez?

Netscape supported JavaScript with Navigator 1.0, Microsoft didn't support it until I.E. 3.0.

Continued...

Perhaps the most widely used JavaScript effect is when an image seems to react when one swipes a mouse over it, usually a button that appears to light up or depress when one places their mouse over the image. But we will get to that later.

Let's get started, but first, a word on environmentalism...

The environment in which one writes
JavaScript can be as simple as Notepad
or the msdos EDIT.EXE program, or as
intricate as Microsoft Word. The only
necessity is whichever word processor
you use *must* be able to save in *plain ASCII text format*.

Continued...

- If you code any of your html by hand, you should be able to use the same application for writing JavaScript.
- Usually the simpler the word processing program, the better.

Enter the Textpad.

My favorite utility for doing this is a shareware program called "Textpad", which you can download a trial version of at http://www.textpad.com. This utility saves in plain ASCII text format, and when installed, includes an option to place the executable in the right click-"Send To" menu. Making it very easy to edit any text/html document with it.

One more thing...

For the tech-heads out there, Textpad also includes a built in hexadecimal editor, which can be very useful if you have trouble mentally converting hexadecimal code into something which more closely resembles English.

• 0: 43617365 20696E20 706F696E 742E

Hello World!

• It is time to write our first script.

We'll start out with a blank html document.

```
<html>
<html>
<head>
<title></title>
</head>
<body>
</body>
</html>
```

As a rule the Java Script is embedded in the html document, anywhere in the <head> or <body>.

The script.

```
<script language="JavaScript">
//Document your code like crazy.
Alert("Hello World");
</script>
```

The play-by-play.

Line#1:

<script language="JavaScript">

Translation:

"Hey browser, I have a special task for you, and I am going to use JavaScript to explain this task to you.

Line#2:

//Document your code like crazy.

Translation:

Disregard what I am about to say, "Document your code like crazy."

"//" is the set of characters used to remark out comments in JavaScript.

Line#3:

Alert("Hello World");

Translation:

OK browser, you are going to give me a simple alert box, and you are going to like it. And in that simple alert box you are going to place the text "Hello World".

Line#4:

</script>

Translation:

This is the end of my special instructions.

Now we put it all together.

```
<html>
<head>
<title>The Hello World Alert</title>
<script language="JavaScript">
//Document your code like crazy.
Alert("Hello World");
</script>
</head>
<body>
</body>
</html>
```

And the Result:

Any Questions?

Now for a simple image swap "script".

Note the quotation marks around the "script". This will still use JavaScript but the code will go directly into the html rather than going requiring its own script tags.

Again, we begin with a blank html document.

```
<html>
<html>
<head>
<title></title>
</head>
<body>
</body>
</html>
```

Here is the "script".

```
<a href="#"
  onMouseOut="document.the_image.src=
  'hup.jpg'"
  onMouseOver="document.the_image.src
  ='hdown.jpg'" >< IMG SRC="hup.jpg"
  width=225 height=225
  name="the_image"></A>
```

And the play-by-play.

Line#1:

< a href = "#"

Translation:

Hey browser, its me again, I am going to give you an object in a moment, which I need you to keep track of.

Line#2

onMouseOut="document.the_image.src='h up.jpg'"

Translation:

Ok browser, while the mouse's pointer is not in the area comprised by the image which I will tell you about later, I want you to use "hup.jpg" as the image...

Line#3

onMouseOver="document.the_image.src='
hdown.jpg'">

Translation:

and while the mouse's pointer is in the area comprised by the image which I will tell you about later, I want you to use "hdown.jpg" as the image.

Line#4

<IMG SRC="hup.jpg" width=225
height=225 name="the_image">

Translation:

Well, its later now, so I can tell you about that image, it is called "hup.jpg" and you should show it with the dimensions of 225x225 pixels. Oh yeah, I will refer to this image as "the_image" so don't get confused.

And we put it all together.

```
<html>
<head>
<title>Catch a Wave</title>
</head>
<body>
<a href="#"
  onMouseOut="document.the_image.src='hup.jpg'"
  onMouseOver="document.the_image.src='hdown.jpg'"
  >< IMG SRC="hup.jpg" width=225 height=225
  name="the_image"></A>
</body>
</html>
```

And the Result:

Any Comments, Questions, Donations?

For more info.

If you are interested in pursuing this further and have not already done so it might be a good idea to check these websites.

http://www.hotwired.com (go to the beginning JavaScript section).

http://developer.netscape.com/tech/javascript/index .html

http://irt.org/script

Thank You.

pmusser@utah.gov